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危害玉蜀黍的葵粉蚧属新种记述

(同翅目:蚧总科,粉蚧科)

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本文记述葵粉蚧属一新种,取名为耕葵粉蚧。新种的正模和副模标本均保存在中国科学院动物研究所。

该粉蚧发现于七十年代初,对此蚧虫的经济意义有一个初步认识过程。最早只知其寄生在高粱的根部。后来在玉蜀黍的根部,有时也在玉蜀黍近地面的叶鞘内发现寄生着密集的虫体。被寄生的植株,轻者生长发育缓慢,矮小细弱,减少产量;重者难以结实,甚至枯萎而死。该蚧虫或造成局部地区的玉蜀黍农田受害日趋明显,或在其分布区内大发生,此起彼伏,难以掌握,所以旧稿数易。根据这一害虫的发展情况应引起有关部门的关注,尽快进行对该蚧虫的观察研究工作,以便及时采取控制其猖獗的措施,确保粮食丰产。现将新种记述如下。

耕葵粉蚧 *Trionymus agrestis* 新种(图1)

雌成虫:虫体常呈长椭圆形,其两侧缘几乎为平行。老熟虫体之中部宽,头和尾端稍狭窄。在玻片标本上测量虫体长约3.8—4.2mm。触角通常8节,其第一节短粗,第八节最长。触角第七节具1根粗毛,第八节常具2根较粗的长毛。眼发达,椭圆形。喙较短,可见分2节,其顶端生有一丛细毛。三对胸足正常发育,跗冠毛细长,爪冠毛纤细,其顶端稍有膨大。后胸气门常比前胸气门发达。具腹裂1个。臀瓣不甚明显,臀瓣刺发达,并且在其附近生有1根长毛。虫体背面体缘的刺孔群在腹部可见7对。臀瓣上的刺孔群是由2根较大的圆锥形刺和一群三孔腺组成,其周围生有6—8根长短与粗细均不相同的毛,通常这对刺孔群着生在较硬化的体壁上。倒数第二对刺孔群是由2根圆锥形的刺和一群三孔腺组成,其周围具3—5根细毛,但这对刺孔群的刺显著小于臀瓣上的刺孔群之刺。位于第七至第四腹节的刺孔群(C_{16}—C_{13})也由2根圆锥形刺和周围的三孔腺以及附近的细毛组成,但明显地依次变小,不仅组成刺孔群的2根刺明显变成小刺,而且周围三孔腺之数量也逐渐减少,其附近或周围的细毛数量也不规则的减少。位于第三腹节的刺孔群(C_{12})通常只有1根小刺及其附近的几个三孔腺,有的虫体此对刺孔群已消失。头顶部的刺孔腺(C_1)常位于两触角间之背侧方,有的个体该刺孔群是由3根小而细的圆锥形刺和周围一些三孔腺组成;有的个体该刺孔群是由2根小而细的圆锥形刺及周围几个三孔腺组成,有时这两根刺相距较远;大部分个体该刺孔群则完全消失。位于头部眼之背方的第二对刺孔群(C_2)其组成和是否存在随个体变化很大,个别虫体具3根小而细的圆锥形刺和几个三孔腺组成;有的个体具2根小而细的圆锥形刺和几个三孔腺组成;有的

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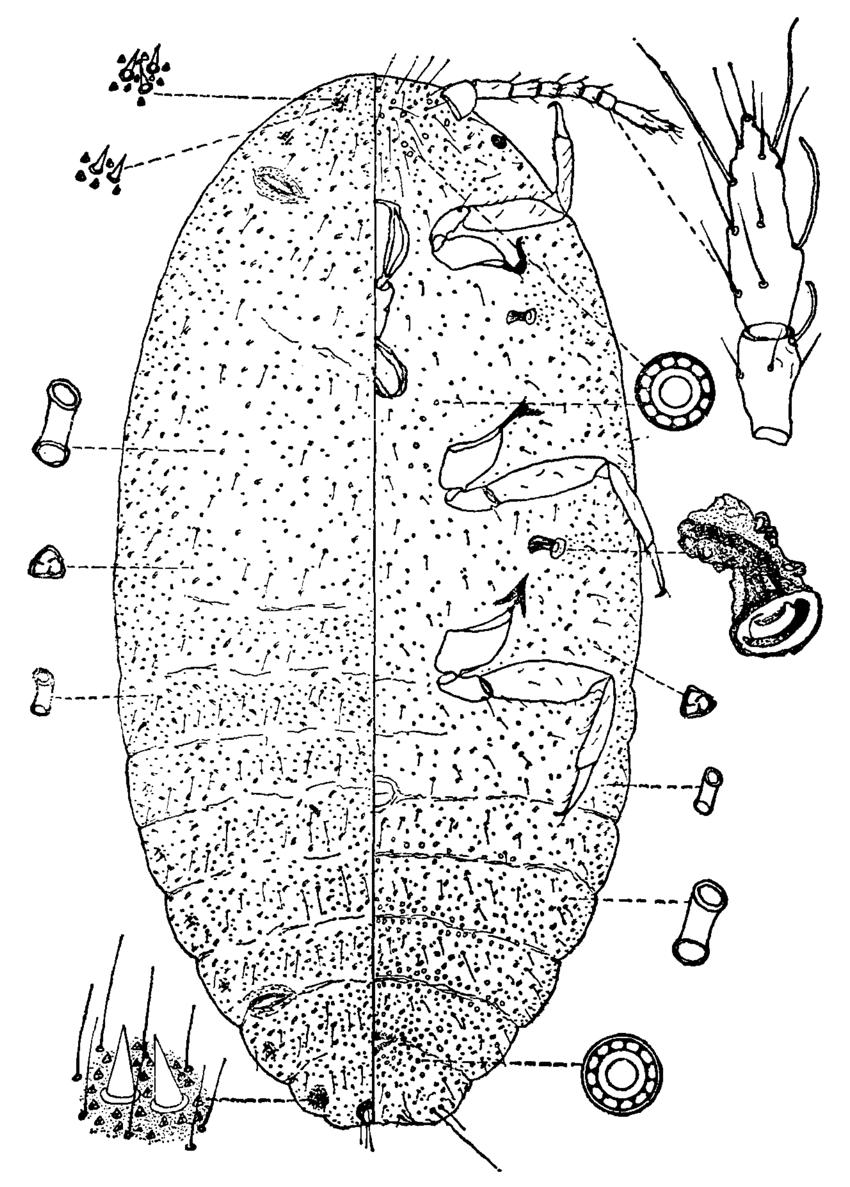


图 1　耕葵粉蚧 *Trionymus agrestis* sp. nov.

个体在此刺孔群位置上只找到单独的细而小的圆锥形刺；但大多数个体该刺孔群已消失。查 50 个虫体，具头部刺孔群者只有 5 头，约占 10%。腹部腹面具有发达的前、后背裂。管状腺具大小两种，并分布于虫体之背和腹面。多孔腺只分布于虫体之腹面，此腺不仅分布在腹部，而且在胸部和头顶部也有分布，但在腹部第五—九节处常形成横带，特别是生殖孔附近的多孔腺十分丰富。虫体的背和腹面分布有长短和粗细均不同的体毛，通常分布于腹面之头顶部，特别是两触角间及口器上方的体毛数量较多。肛环正常发育，具肛环孔和 6 根肛环刺，其刺长约为肛环直径的 2 倍。

正模♀和副模 9♀♀，1973 年 7 月 17 日王子清采自辽宁省，寄主植物：高粱 (*Sorghum vulgare* Pers.)；副模 9♀♀，1976 年 7 月 25 日王子清采自山东省，寄主植物：

玉蜀黍 (*Zea mays* L.)。

本新种与 *Trionymus dolus* Ferris 相近，但从以下特征与后者明显区别：具两种大小的管状腺；腹面的多孔腺从腹部一直到头部均有分布；腹部第三至九节具刺孔群，有的个体之头部具 2 对刺孔群，或有时该部位的刺孔群完全消失。

A NEW SPECIES OF *TRIONYMUS* BERG ON *ZEA MAYS* L. FROM CHINA (HOMOPTERA: COCCOIDEA: PSEUDOCOCCIDAE)

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This paper describes a new species of the genus *Trionymus*. The holotype and paratype are preserved in Institute of Zoology, Academia Sinica.

***Trionymus agrestis* Wang et Zhang sp. nov.** (fig. 1)

Adult female: The type series is represented by old adult female, length of mounted specimens, on slide, attaining almost 3.8—4.2 mm, body elongate, and more or less parallel sided. Cerarii recognizable on 3—9 abdominal segments and in a few specimens 2 pairs occur in the head region. The anal lobe cerarius containing 2 moderately large, conical setae, numerous but scattered pores, and as many as 6 setae of various lengths, these all borne upon a well defined, oval area that tends to be definitely sclerotized. Penultimate cerarii with 2 somewhat smaller, conical setae, 3—5 slender setae, and a cluster of pores. Cerarius of abdominal segment 7—4 composed merely of a pair of smaller, conical setae and a cluster of pores. Cerarius of abdominal segment 3 with one smaller, conical setae and a few pores. Frontal cerarius composed merely of 3—2 small, conical setae and a small group of pores, or perhaps at times lacking. Preocular cerarii with 1—3 small, conical setae and a few pores or perhaps at times lacking. Large and small tubular ducts quite abundant over the dorsal and ventral side. Otherwise the dorsal and ventral side is beset with trilocular pores. On the ventral side, multilocular pores are present from the abdominal segments to the head, for the most part scattered but occurring in more or less distinct bands on abdominal segments 5—8. Circulus present. Anterior and posterior ostioles definitely present. Legs presenting nothing distinctive. Antennae normally 8-segmented. Dorsal and ventral body setae sparse, of various lengths, but all quite small and slender. Anal ring of normal form and position, its setae about twice as long as the diameter of the ring.

Type material: This species is described from 50 slide-mounted specimens, Holotype and 9 paratype females on 2 slides, Liaoning Province, Jul 17,1973, Coll. Wang Tze-ching, Host: *Sorghum vulgare* Pers.; 9 paratype females on 9 slides, Shandong Province, Jul 25, 1976, Coll. Wang Tze-ching, Host: *Zea mays* L.

This new species is evidently close to *Trionymus dolus* Ferris, but differs from the latter by the following characters: Tubular ducts are of 2 sizes. On the ventral side, multilocular pores are present from the abdominal segments to the head; Cerarii recognizable on 3—9 abdominal segments and in a few specimens 2 pairs occur in the head region or perhaps at times lacking.